Kangley-Echo Lake Transmission Line Project DEIS

Seattle Public Utilities' Response
August 30, 2001

GENERAL COMMENTS (GC)

GC-1: The "purpose and need" for the proposed project is neither substantiated nor clearly defined.

There is no explanation of the electrical transmission system serving the King County area that supports the necessity of the proposed line. Instead, the DEIS asserts without substantiation that this specific line is necessary to maintain system reliability. At a minimum, system plans or a regional analysis should be referenced, along with a description of other improvements BPA is considering in the near and distant future so the reader can understand why this specific (and relatively small) link in a much larger system is necessary. In SPU's conversations with BPA staff, it has also been unclear if the need to construct a redundant transmission line for system reliability and the relative location of that line are legal requirements or policy choices. The legal and policy contexts of the project should be clearly distinguished in the DEIS.

Furthermore, the "purpose and need" is the basis for defining alternatives. NEPA only requires that reasonable alternatives be considered. "Reasonable alternatives," however, include those alternatives that can meet the objectives (as defined by the purpose and need) of the proposal. Without a clearly defined purpose and need, the range of reasonable alternatives is very large–much larger than the range of alternatives considered in the DEIS (see General Comment 2, below).

GC-2: The range of alternatives evaluated in detail is too narrow.

The DEIS does not provide sufficient analysis of alternatives outside of the Cedar River Watershed to support their elimination without detailed evaluation. The DEIS cites impacts to "developed land and people living in the area." The potential for these impacts is obvious, but without further explanation there is no support for dismissing these alternatives just because they would have impacts. All of the alternatives included in the DEIS also have impacts, and yet they were not dropped from consideration. Without criteria and explanation, there is no justification for dropping certain alternatives and narrowly limiting the range of alternatives considered in the DEIS. The DEIS should evaluate the range of reasonable alternatives. This type of comparison of alternatives and impacts to the built and natural environments is precisely what an EIS is supposed to provide. Dropping certain alternatives due to cost concerns needs to be supported by detailed cost justifications presented in the DEIS.

Further, NEPA requires that federal agencies consider alternatives that can accomplish the objectives of the proposal, but at a lower environmental cost. This includes considering mitigation measures that could avoid or reduce impacts of the proposed action. The DEIS is silent on the most common types of mitigation measures that could address some of the high and significant impacts that would result from the proposed action (see General Comment 9).

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GC-3: The description of alternatives is insufficient to support evaluation of impacts or mitigation measures.

Several key aspects of the proposed transmission line are not described in sufficient detail to support an evaluation of impacts, even though these details may have been known at the time of the issuance of the DEIS (as evidenced by the issuance of BPA's Final Biological Assessment for this project during the public comment period for the DEIS). For example, the DEIS description of clearing requirements, tower locations, and access roads is general and vague. This information is critical to understanding potential impacts because in many aspects the alternatives are reported to have very similar impacts. For example, the difference in vegetation affected by the alternatives 1 and 2 is less than two percent. Given the uncertainty regarding the project, the difference may or may not actually exist. The importance of clearing is supported by the DEIS, which describes removal of trees on the Cedar River as "high" impact (p. 4-36).

Failure to adequately describe the project compounds the vagueness of proposed mitigation measures, making it impossible to evaluate the effectiveness of mitigation. The net result is a level of uncertainty of the proposal's impacts that significantly reduces the usefulness of the DEIS to reviewers and decision-makers. The fact that specific, known design information for the proposed action was omitted from the DEIS indicates this DEIS does not fully disclose environmental impacts. The fact that BPA issued a Final Biological Assessment (BA) for this project during the public comment period for the DEIS indicates that BPA failed to provide full-disclosure of project impacts. The BA contains specific, known design information (for the proposed action) that is not included in the DEIS. SPU does not expect a proposed action to be fully designed for purposes of environmental impact assessment. However an EIS either needs to commit to specific project details or evaluate all reasonable approaches to those components of the proposed action.

The landowner most affected by this project is the City of Seattle, and the impacts of the project are potentially greatest and certainly most complex for the Cedar River Municipal Watershed (CRW), especially considering 1) the area is the region's major drinking water supply, and 2) the land is being managed under a complex Habitat Conservation Plan (HCP) and associated legal commitments to the federal government. However, BPA's proposed actions and their impacts are described so minimally that it is not possible for the City or the public to evaluate project impacts. Simply stated, the DEIS does not fully disclose environmental impacts. In addition, the DEIS contains numerous inconsistencies among analysis assumptions, as described elsewhere in this comment letter. The reader is not able to effectively evaluate impacts of the proposed actions for all disciplines because sufficient project information is missing, the DEIS contains conflicting analysis assumptions, and BPA does not commit to specific design/construction specifications.

GC-4: Specific information related to project impacts will only be provided in the Final EIS and therefore not subject to public review and comment.

Information on clearing requirements in the CRW (p. 2-6) and access roads (p. 2-7) is not provided in the DEIS, but instead notes the information will be available for the Final EIS. This information is critical to evaluating project impacts and mitigation measures and therefore should be provided as part of the DEIS. Also, the DEIS does not describe tower locations, which would have substantial impacts. Again, the fact that specific, known design information for the Proposed Alternative was omitted from the DEIS indicates this DEIS does not fully disclose environmental impacts. Again, the Final BA for this project contains specific, known design information (for the proposed action) that is not included in the DEIS. The fact that specific, known design information for the proposed action was omitted from the DEIS indicates this DEIS does not fully disclose environmental impacts. The fact that BPA issued a Final BA

for this project during the public comment period for the DEIS suggests BPA could have provided more complete disclosure of project impacts.

GC-5: The DEIS does not discuss consistency with federal, state, and local regulations and policies.

NEPA regulations require that an EIS discuss possible conflicts between the proposed action and the objectives of federal, state, and local land use plans, policies and controls. Where inconsistency exists (as for example regarding King County's sensitive areas and Shoreline Management provisions), the statement should describe the extent to which the agency would reconcile its proposed action with the plan or law [40 CFR 1506.2(d)].

In its scoping letter, SPU identified the need for BPA to address effects of the project on the federally sanctioned and approved HCP. BPA indicates that USFWS [and NMFS] will have to "decide if the transmission line facilities require any change to the existing Habitat Conservation Plan...." The DEIS does not discuss the proposed action's impacts on the CRW HCP. SPU is stating its position clearly: 1) SPU will not accept any need to modify the HCP as a consequence of BPA's activities; and 2) BPA must provide mitigation for any impacts that reduce the conservation value of the City's HCP that, at a minimum, compensates for that reduction in value.

BPA also failed to coordinate with federal agencies on Endangered Species Act prior to releasing the DEIS. The DEIS fails to fully assess impacts on endangered and threatened species such as Chinook salmon, coho salmon, and marbled murrelet (see specific comments elsewhere in this comment letter).

GC-6: The DEIS does not disclose whether or not impacts are significant.

The DEIS is largely silent regarding any determination of the significance of impacts. The DEIS uses the terms "low, medium, and high" to describe impacts. This assists making relative comparisons among the alternatives considered, but it avoids identifying whether or not these impacts are "significant." Based on the NEPA regulations definition of "significant," many of the impacts identified in the DEIS would qualify. However, the DEIS fails to disclose this information. Thus, the public and other agencies, as well as decision-makers, do not have adequate information to review. Because of the importance of "significant impacts" in the NEPA process, failure to disclose this information undermines the very intent of NEPA itself.

GC-7: The DEIS fails to discuss the Decision-making Process

The DEIS says very little about the decision-making process regarding this proposed action. It says almost nothing about the decision BPA has already made regarding narrowing the range of alternatives and the currently preferred alternative (including who made these decisions, when, how, and why). This is important because NEPA regulations prohibit federal agencies from limiting the choice of reasonable alternatives until a Record of Decision (ROD) has been issued [40 CFR 1506.1(a)]. The fact that specific, known design information for the Proposed Alternative has been developed (and was omitted from the DEIS) suggests that BPA has limited the choice of reasonable alternatives prior to the ROD, and indicates this DEIS does not fully disclose environmental impacts.

The DEIS also says very little about the remainder of the process. What happens after the DEIS, and what criteria will be used? For example, will BPA confirm a preferred alternative after the DEIS? Will all of the alternatives be reviewed in greater detail in the FEIS, or will it just cover the preferred alternative? When will BPA take final action? How will that decision be made?

GC-8: Scoping comments from the City of Seattle were not addressed in the DEIS.

Scoping letters from SPU and SCL (October 2, 2000) raised several specific points that are not addressed in the DEIS. These issues include the purpose and need for the project, alternatives outside of the CRW, effects on the drinking water supply during construction, and effects of the proposed transmission line on the HCP, among others. Such omission is contrary to CEQ guidance that states "Every issue that is raised as a priority matter during scoping should be addressed in some manner in the EIS, either by in-depth analysis, or at least a short explanation showing that the issue was examined, but not considered significant for one or more reasons" (CEQ 1981).

GC-9: The DEIS lacks mitigation for unavoidable impacts.

"Mitigation measures" cited in the DEIS are actually standard best management practices (BMPs) and not really project mitigation measures. That is, they do not offset, reverse, or rectify the impacts of constructing the proposed action. Mitigation measures cited in the DEIS never include proposed compensatory mitigation. If "maintaining environmental quality" (p. S-2) was, in fact, one of BPA's purposes in developing this project, then compensatory mitigation would have been integral to that purpose. For example, although the DEIS states that impacts on ESA-listed species of fish are "high," BPA fails to commit to any mitigation that would offset those impacts.

GC-10: Although impacts to cultural resources could be substantial, the DEIS describes no mitigation.

Some areas in the project area and within the CRW have a high likelihood of containing cultural resources or Traditional Cultural Properties, and thus potential for significant impacts. The DEIS omits specific results of archaeological and CMT surveys that have been conducted for this project. Survey results should have been considered in the DEIS. The technical report for this discipline should have been included in the DEIS. The DEIS should have included proposed mitigation actions for any identified sites (if any). Also, the DEIS should recognize that SPU has archaeological standards for the CRW that need to be (and were) followed.

The DEIS's assertion that impacts will be "low" for the proposed action are unsupported by the existence of substantial uncertainty regarding impacts on archaeological resources or Traditional Cultural Properties, for which no assessment has been completed. Given the location of the project, these impacts could be significant. The DEIS should explain this uncertainty, qualify the description of impacts, and provide the needed information for public review.

GC-11: The DEIS does not address regulatory requirements related to drinking water.

In general, the DEIS seems to largely ignore the fact that the Cedar River Watershed is a high quality, unfiltered source of water for 1.3 million people in the Puget Sound region. A casual reader would obtain the impression the CRW is primarily a nature reserve, with a secondary, incidental role as a municipal water supply source.

The DEIS fails to adequately describe potential impacts to the drinking water supply for 1.3 million people. Incidents such as turbidity plumes and diversion shut-downs are critical and significant events in the management of SPU's water supply systems in the CRW. The DEIS needs to address the regulatory requirements related to drinking water and the potential environmental impacts of their proposed action on the drinking water supply.

GC-12: BPA failed to provide public notice to that group of citizens most affected by the proposed action: the people who rely on the CRW for their drinking water.

Public notices and public meetings related to the NEPA scoping and DEIS comment periods have not been directed to the most affected group of citizens: the 1.3 million people who rely on the CRW for their drinking water. This is a violation of NEPA guidance and regulation.

SPECIFIC TECHNICAL COMMENTS ON THE DEIS

NOTE: Regarding the remaining comments in this comment letter and its attachments, SPU does not expect a proposed action to be fully designed for purposes of environmental impact assessment. However an EIS either needs to commit to specific project details or evaluate all reasonable approaches to those components of the proposed action.

SUMMARY

S.2.1.3 The DEIS is not clear why all "woody vegetation" would need to be cleared on the ROW. Also, failing to estimate the area of clearing outside the new (150-ft) ROW results in an understatement of impacts. The DEIS is also inconsistent as to the clearing zone width, as described elsewhere in SPU's comment letter. Further, in conversations with SPU, BPA said they would need to clear an average of 200 ft.

S2.1.5 See comment below under 2.1.1.8.

S2.1.4 BPA says that new roads may cross rivers and streams, but that no new bridges will be built. If a road crosses a river, a bridge would be required. For SPU and the public to evaluate potential impacts, BPA must specify which rivers and streams will be crossed and what type of structure will be constructed at each crossing.

S3.8 The DEIS consistently fails to clarify potential for impacts from vegetation clearing outside the 150 ft ROW.

S3.10.1 The DEIS should state explicitly that some of the areas in the project area and in the CRW have a high likelihood of containing cultural resources or Traditional Cultural Properties and thus a strong potential for significant impacts.

S.4.2 Transportation impacts should include the impacts of hauling timber and moving equipment and materials to and from the project area, unless those impacts are clearly addressed elsewhere, which does not seem to be the case.

S.4.6 In its DEIS scoping letter, SPU identified the need for BPA to address effects of the project on the drinking water supply. The DEIS fails to adequately discuss the risks to the drinking water supply during project construction for any of the alternatives. These risks include the risk of spills that could contaminate the water and the risk of turbidity events that could have very serious regulatory and public health consequences for SPU.

Also, the DEIS neglects to reveal potentially significant impacts on water temperature, which is inconsistent with the conclusion on page 4-30 that impacts on listed fish species would be "high" a result, in part, of unavoidable, increased water temperature in streams and wetlands.

S.4.10 The area to be cleared for the stated 150 ft ROW should be about 160 acres (for the 9-mile length), not counting trees cleared beyond the ROW, yet BPA states that 152 acres will be cleared. BPA indicates on page 2-5 that trees may be cut as far as 200 ft from the edge of the ROW. Further, BPA has informed SPU that an average of 200 ft will be cleared for the proposed action. The DEIS fails to reveal the actual amount of clearing that will occur for the project. Also, the DEIS mentions that a high impact from noxious weeds could be mitigated, but does not indicate how this will be done.

S.4.11 The DEIS concludes that impacts to wetlands would be moderate to low and that impacts to forested wetlands would be moderate are not supported. SPU disagrees. Clearing vegetation and operating equipment in wetlands will produce significant and unavoidable impacts, and clearing trees in a forested wetland destroys its normal ecological functioning. Furthermore, the DEIS proposes no compensatory mitigation, which violates the intent of state and local sensitive areas provisions (such as the King County Sensitive Areas Ordinance). The DEIS needs to correctly state that impacts to wetland resources will be significant.

S.4.16 The DEIS fails to identify potentially significant impacts on public health as a result of potential effects on the drinking water supply during construction and operation (see comments on S.4.6 above, and elsewhere in this comment letter).

PURPOSE AND NEED (Chapter 1)

1.1 Paragraph 2: "Anticipated peak use could now exceed existing system capacity as soon as the winter of 2002-2003."

1.3 "... a new 500-kV transmission line and other transmission equipment would be required by the 2002-2003 winter season...."

These and other statements are not substantiated by citation of data, studies, or other information. The DEIS needs to explicitly provide or cite the data and assumptions on which these claims are based.

PROPOSED ACTION AND ALTERNATIVES (Chapter 2)

Route variations described in this section warrant a detailed discussion in terms of how BPA intends to use these variations to address short-, medium-, and long-term regional power transmission needs. For example, if BPA plans to build a new 50-kV line from Stampede Pass in the future (which could serve the subject project's present-day purpose and need), the cost savings of doing so now may negate the simplistic current-dollar cost difference between that variation and the Proposed Action. In this regard, the DEIS needs to present a complete cost justification (which would include cost analyses of BPA's future transmission line projects) if cost is the main justification for distinguishing among alternatives. Such analyses should include full consideration of opportunity costs and the inflated costs of building these variations in the future. In addition, it appears BPA does not include all foreseeable or projected costs in their cost estimate of the proposed action, which biases their cost comparisons among possible alternatives. Not all project planning costs are included in this analysis, nor are costs for adequate mitigation of unavoidable adverse impacts from the proposed action. For example, there is no discussion of the nature or cost of the mitigation for stormwater runoff quality or quantity that federal agencies would likely require (under regional implementation of the ESA) for the 1.5+ mile of new impervious road surfaces BPA is proposing.

2.1.1.1 Transmission Structures

To minimize impacts of tower construction, the DEIS should commit to using helicopters to the extent possible for delivering and assembling the towers.

2.1.1.4 Right-of-way Clearing

...danger trees could be taken as far as 200 ft from the ROW....

This is not consistent with Table 2-1 (page 2-6), which indicates clearing distances of 153 ft (horizontal distance) and 163 ft (slope distance) from the edge of the 150 ft ROW. Also, there is no mention of the temporary 50 ft construction easement BPA previously mentioned in conversations with SPU. The DEIS, its technical appendices, and associated permitting documents need to present a complete, accurate, and consistent description of the proposed action and its environmental impacts.

Also, based on Table 2-1, BPA would clear an additional 90 ft beyond the 150 ft ROW where trees are about 120 ft tall (as in the CRW). This calculation indicates that the DEIS significantly underestimates the acreage to be cleared. Apparently, 145 acres or more would be cleared in the CRW alone, making the total figure of 152 acres for the 9-mile ROW in the CRW impossibly low.

The DEIS refers to the possibility of developing and using different criteria for tree removal in the CRW that would reduce the number of trees to be removed, stating that the decision will be in the FEIS. The DEIS should provide information on those criteria for public comment prior to releasing the FEIS. The DEIS, its technical appendices, and associated permitting documents need to present a complete, accurate, and consistent description of the proposed action and its environmental impacts.

Also, see comments on S.4.10 above.

2.1.1.5 Access Roads

The DEIS fails to present sufficiently detailed road plans or data, making evaluation of the DEIS impossible. If such data are expected to be included in the FEIS, they should have been included in the DEIS.

"A disturbance width of 20 feet was used to calculate disturbance acreages."

Also, this section indicates new road ROWs will be 50 ft and that disturbance widths between 36 and 40 feet will be routine. Disturbance acreages in the DEIS should have been calculated using accurate and worst-case widths (i.e., 40 ft for temporary and permanent roads within and outside of the ROW, not 20 ft). Also, it is unclear from this discussion if impacts from temporary roads and permanent and temporary staging areas were considered in the analysis of impacts from access roads.

In addition, the DEIS fails to mention or assess new roads in the context of their being new impervious surfaces, which has important ESA implications. In fact, it is our understanding all new impervious surface (such as is proposed in the proposed action) inside the region of critical habitat for Chinook and coho is required to be mitigated for stormwater runoff quantity and stormwater runoff quality before the federal Services are able to consider a project such as this one to be in compliance with the ESA. The DEIS needs to discuss this situation and address the required and appropriate mitigation for new impervious surfaces, as mandated by the ESA and its regional implementation. The DEIS should assess the impacts caused by construction and operation of required mitigation facilities.

2.1.1.6 Stream Crossings

Omission of information here and in Section 4.6.2.2 renders evaluation of impacts resulting from new stream crossings impossible. This is a significant and fatal flaw in the DEIS. The DEIS should provide specific information on where new crossings will be constructed, what structures will be used, and how such construction could proceed.

2.1.1.8 Staging Areas

The DEIS refers to staging areas for construction, but does not specify where those might be located. Staging within the CRW would pose substantial risks to the drinking water supply and would have significant and complex impacts, and the magnitude and nature of those risks and impacts will depend on the location of those areas. To protect the municipal water supply, SPU has "no-tolerance" objectives for spills or leaks of hazardous materials in the CRW. Staging areas in the CRW are not consistent with these objectives.

It is unclear if the staging areas were considered in the analysis of impacts (such as the clearing analysis). The DEIS should be explicit if staging areas were included in the impact analyses.

2.1.4 Cost Estimate

The DEIS should include pertinent details of the cost estimates for the proposed project and all other alternatives (including those that were eliminated), particularly if costs were the basis for dropping certain alternatives. In addition, the DEIS should include citations of where fully detailed cost estimates and analyses may be obtained. All project alternatives (included those that were eliminated) need to be evaluated on the same projected cost bases.

2.3.2 Local Generation

The DEIS fails to mention several local hydroelectric projects that have recently connected to the power grid, or that are being built in partnership with Puget Sound Energy. These projects include Black Creek (rated 3700 kW at 1247 ft), Calligan Creek (rated 5500 kW at 1045 ft), and Hancock Creek (rated 6300 kW at 1129 ft). The DEIS needs to present a detailed discussion of how these power sources fit into regional power planning and how they were considered in the BPA decision-making process regarding the proposed project's purpose and need.

Table 2-2

SPU has the following comments on this table and related DEIS sections:

Land use: The DEIS neglects to mention effects on HCP.

Transportation: The DEIS should include discussion of access roads

Water quality: The DEIS neglects impacts during construction regarding drinking water supply (see comments above)

Fisheries: The DEIS should include assessment in Chapter 4 that impacts to listed fish species would be potentially high. Failing to mention this here fails full public disclosure.

Wetlands: Impacts are much greater than stated, especially to extensive forested wetlands in the CRW.

Cultural Resources: Potential for impacts to archaeological resources or Traditional Cultural Properties are uncertain but could be substantial.

Public health and safety: The DEIS fails to mention potential public health issues associated with impacts on the drinking water supply during construction and operation.

CHAPTER 3—AFFECTED ENVIRONMENT
3.1 Land Use

The DEIS should disclose that land use impacts would be "high" in the CRW, as the proposed project would substantially reduce conservation measures in the City's HCP, which is a primary land-use commitment in the project area.

Also, the DEIS does not adequately describe project details for (and subsequently, potential impacts of) road construction and maintenance, rock source, and construction staging. Clearly, there will be impacts to the transportation system in the CRW; most CRW roads and transportation structures are not adequately constructed to carry large volumes of timber or construction equipment and materials. For example, the DEIS does not identify haul routes for rock or timber; rock source for roads; location of new access roads; location of upgrades to existing roads for bridge crossings, turning radii, width, slope (and other geometry), and surface; location of staging areas; and compensatory mitigation for unavoidable adverse impacts caused by these facilities and activities. The DEIS does not mention the new DNR rules for road BMPs. Also, the DEIS does not address who will bear the cost of on-going maintenance of new access roads and transportation structures (such as bridges and gates). Also, SPU has important safety concerns with drilling, shooting, and transport of explosives in the CRW; these proposed activities are not adequately described. The DEIS also fails to specify timber haul routes, yet selection of routes will have a major influence on the magnitude and nature of impacts both in the CRW (on habitats and species) and outside the CRW (on public roadways).

3.1.2 Cedar River Watershed

"...Seattle owns title to all but a small portion of the Cedar River Watershed."

This is stated ambiguously. The City of Seattle owns only that portion of the Cedar River watershed that lies upstream of Landsburg. The DEIS should state this unambiguously.

3.4.8 King County

The DEIS should acknowledge that the Taylor Mountain site (Manke Property) is used by hikers and equestrians.

NOTE: In general, most of the subsequent sections in Chapters 3 and 4 pertaining to fisheries, wildlife, vegetation, and wetlands were condensed versions of the text in the corresponding Technical Reports. Thus, all SPU comments on appendices A, B, C, and D (which see) can be considered to apply to sections in these Chapters as well. Statements from the DEIS are shown in

italics. SPU comments are shown in normal font below the subject DEIS statement (if any). Typically, SPU's comments pertain only to those lands owned and managed by the City of Seattle within the project area.

3.6.3 Groundwater

The DEIS fails to mention the groundwater influence on the lower Cedar River mainstem and its relationship to the water supply system.

3.6.4 Water Quality

The DEIS fails to address the protection of drinking water. This section also seems to imply that, because there are currently no water quality problems in the Cedar River Watershed, that some degradation of the water quality would be acceptable. This is not correct. Also, the DEIS fails to mention that Washington State classifies the Cedar River above Landsburg as being in a special category where no waste discharges are permitted. The DEIS should correct these deficiencies.

BPA may not be aware of how the regulation of drinking water supplies has increased over the last few decades. The existing BPA transmission line through CRW was constructed at a time when regulation of drinking water supplies was much less strict. This is especially true of the regulation of supplies from unfiltered surface supplies, such as at CRW. Therefore, construction of the proposed action would occur in a much different regulatory environment than existed at the time the first line was constructed.

This regulatory environment results from the federal Safe Drinking Water Act and its amendments, and is defined by detailed regulations adopted by EPA and Washington Department of Health (WDOH). Supplies with unfiltered sources must show adequate source protection through development and implementation of a Watershed Control Program (WCP) that has been approved by WDOH. To remain compliant with WDOH regulations, the WCP would have to be modified to address the construction of the proposed action. On previous construction projects in the watershed, this has been accomplished through a Water Quality Control Plan (WQCP) specific to the project.

Development and implementation of an effective WQCP for a construction project of this magnitude is not a trivial matter. It must identify detailed management practices specific to the methods, materials, and equipment likely to be used on the project, and these practices must be integrated into the plans and specifications given to the construction contractor. The dispersed nature of the construction and its relative proximity to the intake make a WQCP critically important.

The DEIS should acknowledge and discuss this regulatory environment for the protection of drinking water supplies (including Safe Drinking Water Act and Surface Water Treatment Rule). A spill contingency plan is mentioned as mitigation for fisheries on page 4-34, but such plans must expressly deal with drinking water as well.

3.7 Fisheries

The DEIS incorrectly assumes that Chinook and coho salmon will not likely be present for any of the alternatives. The Cedar River will have Chinook salmon in the future. Coho salmon are likely to be in Rock Creek in the future. The Cedar River and its tributaries in the project area are tributary to waters that do support Chinook and coho salmon. The DEIS should address this circumstance. The DEIS should also address potential impacts of permanent and temporary habitat modifications on federally listed fish species. Under the Endangered Species Act and Northwest Power Act, BPA has important

responsibilities as part of the effort to protect, mitigate, and enhance regional salmon runs. However, it appears (as evidenced in the fisheries technical report and Section 2.1.15) this proposed action's adverse impacts on salmon and their habitats are not adequately mitigated. Also, the DEIS should discuss potential impacts to steelhead (an HCP species) beyond the very limited and inadequate discussion presented.

"The fish resources in the study area include resident and anadromous species."

This is a correct but imprecise statement. In the CRW, not all of the tributaries are inhabited by both resident and anadromous species. Also, neither the mainstem Cedar River nor its tributaries currently have anadromous species, but are expected to in coming years. Only basins or tributaries that do not contribute water to the water supply system currently are inhabited by anadromous species (e.g., Walsh Lake Drainage Basin).

Map 8 (and other if appropriate)

Upper Williams Creek and Steele Creek should be shown as potential anadromous fish habitat.

3.7.2.1 Proposed Action

"...cross nine fish-bearing (Type 1, 2, or 3) streams and an unknown number of non-fish-bearing (Type 4 or 5) streams."

Type 4 streams should no longer be considered non-fish-bearing unless extensive sampling has been conducted to determine if that is the case.

Segment C

The DEIS should include a discussion of steelhead trout at the end of this section along with Chinook and coho salmon.

Segment D

"...is used by cutthroat trout and, where it joins with the Walsh Lake diversion ditch,....."

This statement is incorrect and misleading. The Walsh Lake Diversion Ditch does not join Rock Creek except under emergency overflow conditions, which occur rarely during peak flow events. The relationship between Walsh Ditch and Rock Creek needs to be clarified in the DEIS; more detail for overflow conditions and operation needs to be presented in the DEIS.

"...the river and its floodplain are wide enough that the existing forest can provide only about 10 percent riparian shade, so that riparian shade is not a primary control on stream temperature in this reach." (page 3-23)

and

"...the river and its floodplain are wide enough that the existing forest can provide only about 20 percent riparian shade, so that riparian shade is not a primary control on stream temperature in this reach." (page 3-23)

SPU disagrees with these unsupported statements. The DEIS should present data that support this contentions.

"Once passage around the Landsburg Diversion Dam has been established (scheduled for 2002 or 2003), it is likely..." (page 3-23 and 3-25)

This statement is incorrect. This reach will support anadromous fish now prevented from upstream migration by the Landsburg Diversion Dam, including Chinook and coho, and excepting sockeye. The environmental analysis in the DEIS needs to be based on correct assumptions.

3.7.2.3 Alternative 3

"...Taylor Creek is known to contain resident rainbow trout...."

SPU data indicate Taylor Creek has predominately cutthroat trout. Relatively small numbers of rainbow trout are also present.

3.8 Wildlife

The "project area" as defined in the DEIS is an area within 0.25 mile of the ROW. This is too small for the scale of home range sizes and dispersal capabilities of many wildlife species of concern (for example, spotted owl, pileated woodpecker, northern goshawk, marten, and fisher). Also, several wildlife species were eliminated from analysis because habitat is not currently present within 0.25 mile. This limit is arbitrary, especially considering the large home ranges of many species. The DEIS should be based on a wildlife analysis that uses larger areas such that wide-ranging species with large home ranges are included.

Also, the DEIS incorrectly states that marbled murrelet is not expected to occur in the project area. In fact, murrelets have been detected in the upper watershed, where they are possibly breeding. Murrelets are known to fly along major water courses (like the Cedar River) as they travel between marine feeding sites and their terrestrial nest sites. Murrelets can be expected to fly along the Cedar River—through the project area—to and from these areas. Thus, this species is at risk from additional power lines. The DEIS should address the impacts to this ESA-listed species.

3.8.2.1 Forest Community Dependent Species

"... merlins, pileated woodpeckers, and Vaux's swifts are also unlikely to nest within the project area (see Appendix B.)"

Pileated woodpeckers are known to forage regularly in the riparian zone of the Cedar River in the watershed. Suitable nesting habitat is also available in the riparian zone.

Table 3-7

Peregrine falcons nest in the Cedar River Watershed within approximately 5 miles of the proposed ROW corridor.

3.9.3 Vegetation Cover Types

3.9.4.1 Proposed Action

The DEIS needs to describe the age and size of affected trees in Cedar River riparian zone in the Watershed, especially the Sitka spruce and their history.

3.10.1 Regional Overview (wetlands)

"A total of 23 wetlands were identified within the ROWs of the alternatives." and "Wetland buffers were generally intact and forested."

These statements are misleading. Wetland buffers may be intact within the proposed ROW alternatives. In the existing ROW, wetland buffers are not "intact and forested."

"Wetland buffers provide....."

The DEIS needs to discuss the positive effects of intact stream and wetland buffers on water quality and the water supply, as well as a discussion of the positive effects of intact stream buffers on stream temperature, bank stability, etc., and the associated benefits for fish, amphibians, and other species.

CHAPTER 4—ENVIRONMENTAL CONSEQUENCES

4.4. Geology and Soils

DNR's Watershed Analysis procedures suggest that all alternatives go through High and Moderate Landslide Potential areas (for example, inner gorges). However, the DEIS contains no discussion about this or the ancient, deep-seated landslide in the Rock Creek/Steel Creek basins, or the project's potential for causing mass-wasting events and the associated catastrophic channel disturbances. The DEIS should include this. Also, the DEIS should include discussion or analysis of soil erodibility and soil erosion BMPs.

4.5.2 Water Quality

The DEIS fails to address the protection of drinking water. The DEIS should acknowledge this regulatory environment for the protection of drinking water supplies (see comments under Section 3.6.4). A spill contingency plan is mentioned as mitigation for fisheries on page 4-34, but such plans must expressly deal with drinking water as well.

"the City of Seattle and some surrounding water districts"

The DEIS should replace this phrase with "about 1.3 million people in the City of Seattle and 27 suburban cities and water districts."

4.5.2.1 Proposed Action

"...it is possible that surface water runoff containing fuel spills, herbicide runoff and other contaminants could reach the main stream..."

The DEIS mentions here the Proposed Action could result in herbicides entering the Cedar River. This is inconsistent with statements elsewhere in the DEIS that herbicides will not be used in the Cedar

Watershed. Also, to protect the municipal water supply, SPU has "no-tolerance" objectives for spills or leaks of hazardous materials in the CRW. The DEIS should indicate how all spills would be prevented in the CRW.

4.6 Fisheries

The DEIS needs to describe environmental impacts of long-term, repeated maintenance activities.

4.6.1 Impact Levels

"Construction, operation, and maintenance of transmission facilities could impact fish and their habitat as a result of:"

The DEIS should describe the effect of long-term and cumulative effects of maintenance activities (e.g., repeated vegetation clearing) on soil disturbance and stream temperature regimes.

4.6.2 Proposed Action

The DEIS should describe potentials for dispersal of non-native and noxious weed species.

4.6.2.1 Removal of Riparian Vegetation

"...Transmission towers are typically sited on higher ground, and they generally span drainages and associated riparian areas. This siting requirement would minimize potential impacts from riparian clearing because topography facilitates placement of structures that span drainages and increases the likelihood that conductors would be above many riparian areas and require only limited removal of danger trees. Construction of the transmission line, particularly clearing riparian vegetation, has the potential for high impacts on fish. However, BPA would prepare a clearing plan as part of the design of the project to minimize this impact. This plan would evaluate areas to be cleared and the permissible height of existing vegetation that could remain. BPA would site facilities to minimize clearing of riparian areas."

SPU believes these claims can not be made without knowing the specific tower locations and associated infrastructure. Also, this statement suggests very little clearing of riparian vegetation would occur, which is not consistent with the Fisheries Technical Report. According to that Technical Report, even the Cedar River may need riparian clearing. The DEIS needs to identify which stream crossings would span drainages and which would require vegetation removal. The DEIS, its technical appendices, and associated permitting documents need to present a complete, accurate, and consistent description of the proposed action.

4.6.2.1 Removal of Riparian Vegetation

"Construction of the transmission line,....."

SPU will require an approved vegetation removal plan for areas in the CRW. The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

Table 4-3

Information from the HCP in this table is incorrect. Thus DEIS comments related to this table are also incorrect. The table appears to be based on the Draft HCP, not the final, but, even so, is simply wrong. For example, buffers are not an element of the Final HCP (2000). This table and any other references to the HCP should be revised, updated, and clarified throughout the DEIS and its technical appendices to reflect content of the final version of the HCP (2000).

"...features would be installed where needed in accordance with the Washington State Forest Practices Rules" (WSFPR)

SPU standards will be required if they exceed WSFPR. The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

4.6.2.2 Culvert Installation

SPU believes some culverts on BPA's access roads for the existing transmission line may be fish and flow passage barriers. The DEIS should disclose this situation, indicate which of those culverts are fish and flow passage barriers, and describe the methods BPA will use to correct these problem culverts as part of their construction of the proposed action. The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW. SPU standards will be required if these exceed WSFPR.

"....(as with a hung culvert)."

This statement should include "hung/perched" to describe a physical barrier.

"BPA would comply with guidelines for fish passage....."

SPU standards will be required if these exceed WSFPR. The DEIS and technical appendix should commit to ensuring all pertinent plans (such as all road and culvert-related plans) would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

"...and using effective sediment and erosion control methods."

The DEIS needs to specifically describe these methods.

4.6.2.6 Accidental Spills of Hazardous Materials

"BPA would prepare a Spill Prevention and Contingency Plan..."

Because of the potential effects on water quality and drinking water supply, any spill of hazardous materials in the CRW is not acceptable to SPU. The DEIS should include a discussion of how BPA proposes to avoid possibility of <u>any</u> spill. [SPU would require BPA to develop a project-specific Water Quality Control Program (WQCP) that will need to be approved by SPU and DOH.]

4.6.2.7 Species Listed and Proposed for Listing under the Endangered Species Act

"The Proposed Action could potentially impact chinook salmon, bull trout, and coho salmon. ...The level of these potential impacts would be ***high*** *for the following reasons. First, the loss of LWD recruitment would be permanent and would affect streams that, by and large, already contain insufficient LWD.*

Second, in view of the low project area elevation, potential thermal effects could harm fish by causing thermal stress during low flows. Third, there would be little opportunity to mitigate these impacts, although impacts would be less for some streams than for others because in some settings relatively little vegetation clearing would be required."

The DEIS concludes that the impacts are **high** but can not be mitigated. This is significant considering BPA's important responsibilities and commitments under the Endangered Species Act and Northwest Power Act to protect, mitigate, and enhance regional salmon runs. This conclusion also suggests the proposed action is unable to be compliant with the ESA and its regional implementation. The DEIS should disclose this situation and its associated consequences.

"... all streams in the project area are too warm to support bull trout spawning habitat."

The DEIS should provide data or appropriate reference to support this contention.

4.6.2.12 Cumulative Impacts

"Cumulative impacts on fish and other aquatic resources are those impacts that act not only on the local area where the impact occurs, but at every point downstream that is influenced by the impact."

This is an incorrect definition of cumulative impacts. The DEIS is describing indirect effects, not cumulative impacts. Cumulative effects are those effects from any number of sources within an area or watershed that are additive. One significant omission in this analysis, as mentioned in the review of the Fisheries Technical Report, is the lack of consideration of cumulative effects connected to the existing transmission ROW and the proposed ROW.

"Fine Sediment Load —...The sensitivity of a watershed to the cumulative effects of additional sediment load depends on the distribution of resources sensitive to fine sediment inputs, such as spawning beds, as well as the quantity and location of fine sediment sources, soils, slopes, vegetation cover, and flow regime. If the Proposed Action were implemented, fine sediment production would continue to be ***low****."*

In general, most of Chapters 3 and 4 pertaining to fisheries, wildlife, vegetation, and wetlands are condensed versions of the text in the corresponding technical reports. This DEIS statement is an example of how condensing material for the DEIS from the Fisheries Technical Report resulted in an inadequate discussion of the issue. The first sentence fragment in this citation above describes the potential generic effects; the second concludes, with no supporting analysis presented, that the effects are low. In addition, as discussed in SPU's review of the Fisheries Technical Report, the analysis of sediment impacts is deficient.

LWD Recruitment

"... (which do not spawn in such warm streams)."

The DEIS should provide data or an appropriate citation to support this contention.

Table 4-4

This table contains incorrect information. For example, based on data provided in Burton (1999), the earliest confirmed sighting of Chinook salmon in the Cedar River is August 18. Based on data in Burton (1997), the latest recorded steelhead spawning is June 11, and the latest date of completion of steelhead

spawning is August 11. The DEIS and its environmental analyses should be based on correct information on the affected natural resources. This table should be revised to include correct information. Also, this or another table should address lamprey species in the same manner. (Burton, Karl. 1997. Cedar River steelhead monitoring program annual report. Seattle Public Utilities.) (Burton, Karl. 1999. Temporal and spatial distributions of Cedar River Chinook salmon spawning activity. Seattle Public Utilities.)

Section 4.7 Wildlife
4.7.1 Impact Levels

The DEIS and its technical appendix should address impacts from changes in behavior of species (e.g., travel barriers, dispersal barriers).

4.7.2.3. Bird Collision

Though the incidence of electrocution on transmission lines is low, it should be discussed and thoroughly evaluated. The DEIS should commit to a monitoring and adaptive management program to evaluate bird mortality by both collision and electrocution. The DEIS and technical appendix should commit to ensuring all pertinent plans would meet and be conducted by SPU standards and approval for those portions of the project constructed in the CRW.

Table 4.5
Aquatic Communities

Totals do not match the values listed. Values given for wetlands are inconsistent with the values presented in Table 5 of Appendix B. The DEIS, its technical appendices, and associated permit documents need to present a complete, accurate, coherent, and consistent description of the proposed action.

4.7.2.5 Forest Community Dependent Species

"... both band-tailed pigeon and blue grouse...."

Ruffed grouse nesting and foraging habitat would be more impacted in most of the project area at such low elevations than that of blue grouse. Elevation range use needs to be checked and clarified for these species and a correct analysis presented in the DEIS.

4.7.2.13 Mitigation

Though most of the impacts to wildlife were described as moderate, mitigation proposed was generally simply minimization of the impact. This is insufficient mitigation for moderate levels of impact. Compensatory mitigation should also be included.

Bird Collision

"Provide bird marking in known flight corridors."

The DEIS presents insufficient information for reviewers to effectively evaluate this method. The DEIS should disclose known flight corridors, and needs to add compensatory mitigation actions for mortality.

Several raptor species utilize ROW corridors. The DEIS should commit to the use of all available types of structural modification(s) for lines and towers that prevent and/or minimize negative impacts to any avian species over the full extent of the ROW (inside and outside of the CRW).

Forest Community Dependent Species

The DEIS should commit to including snag-creation mitigation along the edges of the cleared ROW to create nesting and foraging habitat for snag-dependent forest species.

Riparian Community Dependent Species

"Span riparian corridors to the extent possible..."

The DEIS should identify streams on which this is possible, so reviewers can evaluate potential impacts.

4.7.2.14 Cumulative Impacts

The DEIS classifies cumulative impacts as "low," with little or no data to support this conclusion. The DEIS should present data and a complete analysis of cumulative impacts.

"The HCP also outlines plans to close certain roads within the CRW,..."

It is inappropriate for BPA to be allowed "mitigation credit" for road decommissioning contained in the HCP and accomplished by the City of Seattle. See additional comments elsewhere in this comment letter.

4.8 Vegetation

"BPA is collecting data and analyzing the feasibility of using a different clearing criteria within the CRW that would take fewer trees..."

This evaluation should be completed and included within the DEIS so reviewers can evaluate the actual impacts of tree removal and habitat conversion within CRW, rather than simply in the final EIS. . Further, the criteria used for evaluation should be made explicit so that review of how tree removal would occur could be technically evaluated.

Tables 4-6 and 4-7

The relationship between the acreage shown in these tables is not clear. For example, mid-seral was defined as in the range of 15 to 35 years, but the total mid-seral acreage for the proposed action in Table 4-7 (26 ac), is not equivalent to the 10-35 year age category in table 4-6 (0 ac). The DEIS, its technical appendices, and associated permit documents need to present a complete, accurate, coherent, and consistent description of the proposed action and its impacts.

4.8.2.3 Operation and Maintenance Impacts

"This is a low impact because it could be mitigated."

The DEIS should describe how this impact will be mitigated.

4.8.2.4 Mitigation

"BPA would consult with the DNR, SPU, and other ...."

This list should include the U.S. Forest Service.

"Management practices regarding noxious weed control... have been defined in the BPA Transmission System Vegetation Management Program."

Given that the DEIS acknowledges the current ROW has extensive invasion and occupation by noxious weeds, the current policies and procedures appear to be inadequate. See additional comments on noxious weed management elsewhere in this comment letter.

"Areas would be maintained using a combination of manual methods and herbicides.... No herbicides would be used in the CRW."

The DEIS should present much more detail on how BPA intends to eradicate noxious weeds in CRW. See additional comments on noxious weed management elsewhere in this comment letter. Data on the success or failure of the proposed methods in other areas should be included so reviewers can adequately evaluate the proposal and its likelihood of success.

"The Muckleshoot Tribe would like the opportunity to salvage or relocate plants before construction."

Is this a commitment to allowing the Muckleshoot Tribe to do this? What, if any, limitations would be placed on this? Would entire trees be given to the tribe? What input would the landowner have? The DEIS should explicitly describe these activities.

"These are also measures that the Muckleshoot Tribe would like in included as mitigation:"

Is this a commitment to include these proposals as mitigation? The DEIS should explicitly describe these measures and be clear regarding BPA's commitment to use them as mitigation.

Section 4.9 Wetlands

4.9.2 Proposed Action

"BPA would avoid crossing wetlands where possible, and where impacts are unavoidable, BPA would use best management practices to minimize destruction or denigration of the wetland to the maximum extent practicable."

This is a misleading statement. The alternatives were not chosen to avoid wetlands, and any wetlands in the path of these ROWs could not reasonably be avoided. The DEIS should acknowledge that this was the case, and should properly evaluate realistic potentials for avoiding wetlands and riparian zones. The DEIS statement that BMPs would be used to minimize wetland impacts is not adequate for effective evaluation of the proposed action.

Table 4-10

Acres in this table do not agree with those in the corresponding Table 2 in the Wetlands Technical Report. The DEIS, its technical appendices, and associated permitting documents need to present a complete, accurate, coherent, and consistent description of the proposed action.

"Construction would include clearing shrubs, trees, and herbaceous vegetation from wetlands and wetland buffers."

The DEIS should describe the justification and/or reason for clearing all shrubs and herbaceous vegetation from wetlands and wetland buffers, as is indicated by this statement.

"Wetland Vegetation Impacts —Overall impact on wetland vegetation would be ***moderate****."*

As pointed out in the SPU comments on the Wetlands Technical Report, conversion of forested wetlands to scrub-shrub or emergent wetlands constitutes a **high** impact, according to definitions used for analysis (impairment of ecological integrity). The DEIS and its analysis should be corrected to reflect this.

Wildlife Impacts

The DEIS should address impacts to amphibians.

4.9.2.4 Mitigation

"Standard mitigation measures to minimize wetland impacts include the following:"

That is a true statement, but the DEIS should commit to implementing even these minimal mitigation measures. These measures alone cannot mitigate for the unavoidable impacts to wetlands that will occur.

4.12 Cultural Resources

Some areas in the project area and within the CRW have a high likelihood of containing cultural resources or Traditional Cultural Properties, and thus potential for significant impacts. The DEIS omits specific results of archaeological and CMT surveys that have been conducted for this project. Survey results should have been considered in the DEIS. The technical report for this discipline should have been included in the DEIS. The DEIS should have included proposed mitigation actions for any identified sites (if any). Also, the DEIS should recognize that SPU has archaeological standards for the CRW that need to be (and were) followed.

The DEIS's assertion that impacts will be "low" for the proposed action are unsupported by the existence of substantial uncertainty regarding impacts on archaeological resources or Traditional Cultural Properties, for which no assessment has been completed. Given the location of the project, these impacts could be significant. The DEIS should explain this uncertainty, qualify the description of impacts, and provide the needed information for public review.

4.13 Noise, Public Health, and Safety

The DEIS does not address the impact of anticipated increases in noise on wildlife populations. Also, the DEIS needs to discuss how the new transmission line will interfere with CRW staff radio usage and reception.

In its scoping letter, SPU identified the need for BPA to address effects of the project on the drinking water supply. The DEIS completely fails to discuss the risks to the drinking water supply during project construction for any of the alternatives. These risks include the risk of spills that could contaminate the water and the risk of turbidity events that could have serious regulatory and public health consequences for SPU. See also SPU's comment under Environmental Consultation, Review, and Permit Requirements, immediately below.

CHAPTER 5—CONSULTATION, REVIEW AND PERMIT REQUIREMENTS

The DEIS should include a new section on the Washington Department of Health (DOH) Rules for Group A Public Water System (246-290 WAC). This section would summarize the federal Safe Drinking Water Act and subsequent regulations that require a high level of protection for a source of unfiltered drinking water such as the Cedar River. Because SPU's Cedar River source is unfiltered, SPU is required to control the watershed in accordance with a DOH-approved control program. Obviously, the currently approved control program does not address BPA's proposed project. For previous construction by SPU and SCL in the watershed, SPU required development of a project-specific Water Quality Control Program (WQCP) that could be approved by DOH as a supplement to the permanent control program. Typically, the program was prepared by a specialty sub-consultant in the consultant design team. SPU would require BPA to produce a WQCP for this project that would be acceptable to SPU and DOH.

5.2.1 Federal list

The DEIS incorrectly states that marbled murrelet is not expected to occur in the project area. Murrelets have been detected in the upper watershed, where they are possibly breeding, and can be expected to fly along the Cedar River to these areas. Thus, this species is at risk of colliding with power lines in the CRW. The DEIS should acknowledge this and provide a suitable analysis of impacts.

5.4 Heritage Conservation

The DEIS states that no culturally modified trees were found in the project area, but SPU believes that the Muckleshoot Tribe may have observed some of these in the project area. [*Contact Tom Minichillo.*]

5.5 Federal, State, Areawide, and Local Plan and Program Consistency

As previously mentioned, the DEIS fails to mention how BPA intends to meet the intent of local sensitive areas regulation such as King County Sensitive Areas Ordinance. BPA is required to meet the standards in this ordinance, which would not occur under measures describe in the DEIS. The DEIS should acknowledge this requirement and indicate how it will so meet the intent of such local and state regulations.

5.5.9 City of Seattle Cedar River Watershed Habitat Conservation Plan

The DEIS should acknowledge this proposed action is not a "covered activity" under the HCP (the primary land management document/direction in the project area) and then commit to not diminishing the conservation commitments in the HCP. The DEIS should explicitly describe how it intends to avoid diminishing HCP conservation commitments (for example, by committing to providing appropriate and effective compensatory mitigation).

5.17 Underground Injection Permits under the Safe Drinking Water Act

"none of the alternatives would...adversely affect any surface water supplies"

This statement ignores the role of CRW in providing drinking water for 1.3 million people. The DEIS should correct this section to reflect this reality.